

1                   ABSTRACT OF THE INVENTION

2       An apparatus for transmitting data between downhole tools is disclosed in one  
3       embodiment of the present invention as including an annular core constructed of a  
4       magnetically-conductive material. At least one conductor, electrically isolated from the  
5       annular core, is coiled around the annular core. An annular housing constructed of an  
6       electrically conductive material is used to partially enclose the annular core and the  
7       conductive coil. The annular housing is shaped to reside within an annular recess formed  
8       into a surface of a downhole tool, and is electrically insulated from the surface. A biasing  
9       member is used to effect a bias between the annular housing and the annular recess, urging  
10      the annular housing in a direction substantially perpendicular to the surface.

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